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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/789,419	02/27/2004	Christoph Zander	ZANDER	5241
20151 7590 04/20/2007 HENRY M FEIEREISEN, LLC 350 FIFTH AVENUE			EXAMINER	
			ALEXANDER, LYLE	
SUITE 4714 NEW YORK, NY 10118			ART UNIT	PAPER NUMBER
			1743	
SHORTENED STATUTOR	Y PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE	
3 MO	NTHS	04/20/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	Application No.	Applicant(s)			
Office Action Summany	10/789,419	ZANDER ET AL.			
Office Action Summary	Examiner	Art Unit			
	Lyle A. Alexander	1743			
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim fill apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	L.  lely filed  the mailing date of this communication.  O (35 U.S.C. § 133).			
Status					
1) Responsive to communication(s) filed on 2/5/0	Responsive to communication(s) filed on 2/5/07 election.				
2a) This action is <b>FINAL</b> . 2b) This					
3) Since this application is in condition for allowar	3) Since this application is in condition for allowance except for formal matters, prosecution as to the merit				
closed in accordance with the practice under E	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.				
Disposition of Claims					
4) ☐ Claim(s) 1-6 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration.  5) ☐ Claim(s) is/are allowed.  6) ☐ Claim(s) 1-6 is/are rejected.  7) ☐ Claim(s) is/are objected to.  8) ☐ Claim(s) are subject to restriction and/or election requirement.					
Application Papers					
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) access Applicant may not request that any objection to the Replacement drawing sheet(s) including the correction of the oath or declaration is objected to by the Examine.	epted or b) objected to by the Edrawing(s) be held in abeyance. See on is required if the drawing(s) is obj	ected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119					
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>					
Attach mount(s)					
Attachment(s)  1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)					
Notice of Draftsperson's Patent Drawing Review (PTO-948)   Paper No(s)/Mail Date   Notice of Draftsperson's Patent Drawing Review (PTO-948)   Paper No(s)/Mail Date   Notice of Informal Patent Application   Paper No(s)/Mail Date 2/27/04.   Other:					
S. Patent and Trademark Office					

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The Office received the 2/5/07 election and inadvertently search both inventions of group I and II. The Office has decided to rejoin the two inventions because a complete search has been made for both groups I and II.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claim 4 is rejected under 35 U.S.C. 102(b,e) as being clearly anticipated by Costela et al. or Glabe et al. respectively.

Costela et al. teach the claimed pyrromethene difluoroborate compound.

Glabe et al. teach a well known and commercially available fluorescent label is disprromethene boron fluoride (Biodipy) [exemplary is claim 7]. The Office has read the

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taught dye, diyprromethene boron fluoride (Biodipy), as identical to the claimed pyrromethene difluoroborate dye.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schooley et al. (USP 6,521,459) in view of Glabe et al. (USP 6,770,448).

Schooley et al. teach a method of labeling a refrigerant lubricant with a fluorescent label to detect leaks in the system. Schooley et al. teach the use of naphthalimide dyes. Schooley et al. are silent to the claimed pyrromethene difluoroborate dye.

Glabe et al. teach a well known and commercially available fluorescent label is disprromethene boron fluoride (Biodipy) [exemplary is claim 7]. The Office has read the taught dye, disprromethene boron fluoride (Biodipy), as identical to the claimed pyrromethene difluoroborate dye.

The court decided In re Leshin (125 USPQ 416) that selection of a material based upon its suitability of intended use would have been within the skill of the art. The Office has read the selection of a well known commercially available indicator on the material and the suitability of intended use has been read on the use as a fluorescent indicator. It would have been within the skill of the art to modify Schooley et al. in view of Glabe et al. and use disprromethene boron fluoride (Biodipy) as a fluorescent label as the selection of a material based upon its suitability of intended use.

Claims 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Costela et al. [cited by Applicants].

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Costela et al. teach the claimed pyrromethene difluoroborate compound. Costela et al. are silent to the claimed octanoic acid solvent, the claimed concentration and the claimed complexes.

The court decided <u>In re Boesch</u> (205 USPQ 215) that optimization of a result effective variable is ordinarily within the skill of the art. A result effective variable is one that has well known and predictable resultes. Choice of solvents, concentration and complexes are all result effective variables and within the skill of the art.

It would have been within the skill of the art to modify Costela et al. and use an oxtanoic acid solvent in a concecentration of 100g oxtanoic acid to 350 g of pyrromethene difluoroborate dye as optimization of a result effective variable.

Additionally, it would have been within the skill of the art to use the claimed pyrromethene difluoroborate dye complex of the general formula "(I) 4,4-difluoro....indacenen" as one having ordinary skill in the art would have expected the same result from this complex as any other pyrromethene difluoroborate dye, and the modification would have been within the skill of the art as optimization of a result effective variable.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lyle A. Alexander whose telephone number is 571-272-1254. The examiner can normally be reached on Monday, Wednesday and Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on 571-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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